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EXAMINER
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SHANG, ANNAN Q

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/690,856  
Filing Date: October 22, 2003  
Appellant(s): TSAI ET AL.

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EAMON J. WALL  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 11/20/08 appealing from the Office action mailed 03/25/08.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-4, 10-14, 21-26 and 28-33 are rejected under 35 U.S.C. 102(b) as being anticipated by **Radha et al (6,806,909)** previously cited.

As to claim 1, note the **Radha** reference figures 3-12, discloses seamless splicing of MPEG-2 multimedia data streams, the method comprising:

Serving a first video stream with a packet identifier (PID) value (fig.3, col.2, lines 41-59, col.5, line 29-col.6, line 1+, col.9, line 41-col.10, line 27 and col.17, lines 48-59), note that the PID value is a point in time;

Determining (CPU 351) shifts needed to be applied to timing information in a second video stream in order to generate recalculated timing information (col.15, lines 61-67, col.18, line 51-col.19, line 30, line 31-col.20, line 41 and col.21, lines 1-41); replacing the timing information in the second video stream with the recalculated timing information, where the shifts are determined based on a last received clock (figs.10-11, col.15, line 42-col.16, line 63, col.18, line 51-col.19, line 30, line 31-col.20, line 41 and col.21, lines 1-41);

Transitioning (CPU 351) in an immediate and smooth manner to a second video stream having the same PID value and serving the second video stream (col.15, line 42-col.16, line 63, col.18, line 51-col.19, line 30, line 31-col.20, line 41 and col.21, lines 1-41).

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As to claims 2-3, Radha further discloses where transitioning in an immediate and smooth manner comprises transitioning without an unsynchronized delay at a beginning of the second video stream and without an unstable period at an end of the first video stream and further comprises transitioning without an unsynchronized delay at a beginning of the second video stream and without an unstable period at the end of the first video stream (col.18, line 51-col.19, line 30, line 31-col.20, line 41 and col.21, lines 1-41).

As to claim 10, the claimed "A method for transitioning between digital video streams..." is composed of the same structural elements that were discussed with respect to the rejection of claim 1. Furthermore Radha further discloses transmitting a first video stream; where the first video stream has associated with it a plurality of transition points comprising respective beginnings of a stripe section of a storage drive in a storage array (col.17, lines 22-47, col.18, line 60-col.18, line 40, col.20, lines 13-35 and col.21, lines 1-41)

As to claims 11-12, 2-3, Radha further discloses where the timing information includes decoding and presentation time stamps and includes clock reference values (col.15, line 42-col.16, line 63, col.18, line 51-col.19, line 30, line 31-col.20, line 41 and col.21, lines 1-41).

As to claims 11-12, 2-3, Radha further discloses where the method is performed at a distribution head end and at a remote hub of a distribution system (col.17, line 48-col.18, line 1+).

As to claims 21-22, 2-3, Radha further discloses where the shifts applied to timing information are adapted to a lag between the time of a transition at a server and the time of the transition at a subscriber station and where the shifts comprise differences between a program clock reference of the first video stream and a program clock reference of the second video stream (col.15, line 42-col.16, line 63, col.18, line 51-col.19, line 30, line 31-col.20, line 41 and col.21, lines 1-41).

As to claims 23-26, 28, 29, 2-3, Radha further discloses where a first packet including recalculated timing information is associated with discontinuity indicator, where the discontinuity indicator is adapted to cause a clock reset at a subscriber station, where the first video stream has associated with a plurality of transition points, each transition point identified via a discontinuity indicator (col.15, line 42-col.16, line 63, col.18, line 51-col.19, line 30, line 31-col.20, line 41 and col.21, lines 1-41), where the transition points are associated with respective reference frames, where the transition points comprise respective beginnings of a stripe sections of a storage drive in a storage array, where the transition points are associated with respective reference frames and where the transition points are associated with respective NULL packets (col.15, line 42-col.16, line 63, col.18, line 51-col.19, line 30, line 31-col.20, line 41 and col.21, lines 1-41).

As to claims 30-33, 2-3, Radha further discloses receiving a signal to transition from the video to the second video stream and removing packets of the first video and transmitting picture repeat packets in substitute, where the picture repeat packets comprise zero motion vectors, further comprises after receiving the signal to transition

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and before removing packets, transmitting packets of the first video stream until a first packet comprising a reference picture, receiving a signal to transition from the first video stream to the second video stream and removing packets of the first video stream and inserting NUL packets in substitute (col.15, line 42-col.16, line 63, col.18, line 51-col.19, line 30, line 31-col.20, line 41 and col.21, lines 1-41).

### **(10) Response to Argument**

The Examiner respectfully disagrees that the rejection should be reversed.

With respect to the rejection of claims 1-4, 10-14 and 21-33, under 35 U.S.C. 102(b) as being anticipated by **Radha et al (6,806,909)**, Appellant cites portions of MPEP, discusses the prior art of record (see page labeled 11 of 24 of Appellant's Brief) and argues that "...Radha fails to teach or suggest at least 'transitioning in an immediate and smooth manner to a second video stream having the same PID value' as the first video stream..." that "...Appellant's disagree with such an interpretation of Radha..." that "...fails to teach or suggest at least that 'the first video stream has associated with a plurality of transition points each comprising a beginning of a stripe section...' that "...nowhere does Radha teach transition points being related to specific locations of a stripe sections or comprising a beginning of a stripe section of a storage device..." (see page labeled 13 of 24 of Appellant's Brief).

In response, Examiner disagrees with Appellant for several reasons. **Radha** reference figures 3-12, discloses seamless splicing of MPEG-2 multimedia data streams. Radha discloses that a Microcontroller which communicates with memory

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(figs.10-12) and serves a first video stream with a packet identifier (PID) value (figs.3-6, 11-12, col.2, lines 41-59, col.5, line 29-col.6, line 1+, col.9, line 41-col.10, line 27, col.17, lines 48-59 and col.18, line 51-col.19, line 1+), note that the PID value is a point in time; Radha further disclose where the microcontroller or CPU 351, determines shifts needed to be applied to timing information in a second video stream in order to generate recalculated timing information (col.15, lines 61-67, col.18, line 51-col.19, line 30, line 31-col.20, line 41 and col.21, lines 1-41); replaces the timing information in the second video stream with the recalculated timing information, where the shifts are determined based on a last received clock (figs.10-11, col.15, line 42-col.16, line 63, col.18, line 51-col.19, line 30, line 31-col.20, line 41 and col.21, lines 1-41), and transitions (CPU 351) seamlessly in an immediate and smooth manner to a second video stream having the same PID value and serving the second video stream (col.15, line 42-col.16, line 63, col.18, line 51-col.19, line 30, line 31-col.20, line 41 and col.21, lines 1-41). Radha teaches that "...the method of the invention for splicing MPEG-2 multimedia programs, in the same or different multimedia data streams..." (col.5, lines 29-31) and further teaches seamlessly transitioning from a first video stream to the second video with the same PID value (time value). In other words seamless transition takes place if the first video PID value (time value) is equal to the second video PID value (time value) or switching to a second stream at the same time value (col.5, lines 55-59, col.7, lines 51-55, col.10, line 7-27 and col.15, line 42-col.16, line 63). Hence the rejection is proper, meets all the claim limitations and should be sustained. Examiner further disagrees with Appellant's assertion of the storage/retrieval video streams in the storage drive for



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several reasons. Radha discloses that "...pack the data stream into disks blocks and...groups of blocks are striped within the HDS..." and "...reading or writing all the files in all the HDSs..." The HDS (hard drive systems contains redundant arrays of inexpensive disks 'RAID') and further discloses a controller which schedules all the switching though...in a round robin or more complex manner so that...." (col.17, lines 22-47, col.18, line 60-col.18, line 40, col.20, lines 13-35 and col.21, lines 1-41). Radha clearly meets all the claims limitations. Hence the rejection is proper, meets all the claims limitations and should be sustained.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Annan Q Shang/

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